

fourth of the outer of a bright yellow colour; the basal half of the first abdominal segments all round and the apical below yellow, tinged with fulvous; the greater part of the ventral segments, the top and the sides of the middle, testaceous. Thorax, and especially the median segment, densely covered with long, pale fulvous pubescence; the second and following abdominal segments densely covered with a fulvous pile. Wings hyaline, the stigma testaceous, the nervures black. ♀.

Length 14 mm.; ovipositor 1 mm.

Kuching, March (*R. Shelford, M.A.*).

Face irregularly rugosely punctured, keeled down the middle, the lower part with two short, stout keels on either side of the middle. Clypeus irregularly punctured. Front with some irregular striæ. Centre and sides at the base of the mesonotum irregularly stoutly reticulated; the sides raised into a stout keel. Scutellum apparently irregularly rugose (the sculpture hid by the dense pubescence); the sides stoutly keeled, and there are two keels on the apical central half. Median segment coarsely, irregularly rugose. Upper part of propleuræ strongly longitudinally striated; the mesopleuræ strongly longitudinally striated all over, the striæ curved and almost forming reticulations in the middle. Middle tarsi blackish at the apex.

XVIII.—*On a Second Collection of Mammals obtained by Dr. W. J. Ansorge in Angola.* By OLDFIELD THOMAS and R. C. WROUGHTON.

IN the 'Annals' for last year* an account was given of the mammals obtained during 1903 in Northern Angola by Dr. W. J. Ansorge, and the present paper is based on a series formed by the same collector during 1904 in the central part of that country.

Dr. Ansorge was not able to devote so much attention to mammals as on his previous trip, but the series he obtained is still a very valuable one and adds considerably to our knowledge of Angolan mammals. It consists of about 90 specimens belonging to 34 species, of which we have found it necessary to describe 5 as new, the most notable being the fine rodent-mole we have named *Georychus Ansorgei*.

* Ann. & Mag. Nat. Hist. (7) xiii. p. 405 (1904).

1. *Galago Monteiri*, Bartlett.

♂. 15. Ndongo, Benguella.

Very similar in colour to the Nyasan *G. Kirkii*, Gray.

2. *Galago moholi*, Smith.

Benguella.

3. *Epomophorus Dobsoni*, Boc.

♂. Kalonga, Bihé. Alt. 6200 feet.

The skull of this interesting species is very different in the proportions of the palate from that of any other member of the genus.

4. *Hipposiderus caffer*, Sund.

♀. 58. Caiala.

5. *Macroscelides brachyurus*, Boc.

♂. 32; ♀. 19, 33. Caconda, Benguella. Alt. 5700 feet.

6. *Macroscelides Schinzi*, Noack *.

♂. 82, 83; ♀. 80. Fort Quillenges, Benguella.

7. *Crocidura* sp.

♂. 62. Caconda.

8. *Cynælurus jubatus*, Schr.

Benguella.

9. *Herpestes Bocagei*, sp. n.

= *H. gracilis punctulatus*, Boc. (nec *H. punctulatus*, Gray, 1849).

♀. 17. Caconda, Benguella. Alt. 5700 feet.

This specimen agrees excellently with the description given by Bocage of his *H. g. punctulatus* (except that the head, though dark, is not "presque noire"), but differs entirely from *H. punctulatus*, Gray, the type of which is in the British Museum. Indeed it much more resembles *H. ochraceus*, Gray. In the true *H. punctulatus* the speckled effect produced by the annulation of the individual hairs is present on the tail both above and below quite to the black

* *Macroscelides brachyrhynchus*, var. *Schinzi*, Noack (Zool. Jahrb. 1889, iv. p. 198).

tip and also on the whole under surface of the body, while in *H. ochraceus*, as shown by the type, the annulation of the hairs ceases on the distal half of the tail and is entirely absent on the belly. The claws, too, are as in *ochraceus* and in strong contrast to the much longer, stouter claws of *punctulatus*. In *Bocagei* the hairs on the cheeks are ringed black and white, the tips being white; on the crown and nape the white gives place to brown, while on the back the hairs, which are 10–15 mm. long, have the basal third or half pale, then a ring, 3 mm. broad, black, a similar ring pale brown, and, finally, the tip black; on some of the longer hairs there is a second black ring with its accompanying brown ring. This annulation of the hairs is continued on the proximal third of the upper surface of the tail; the remainder of the upper surface and the whole under surface of the tail, excepting the black tip, is chestnut-brown. The under surface of the body is a reddish buff, the “roux-orangé uniforme” of Bocage’s description; in *ochraceus* it is straw-colour or dirty white.

The skull of *Bocagei* in size approximates to that of *ochraceus*, but in shape it distinctly resembles that of *punctulatus*; it is narrow and long-snouted, instead of broad and snub-nosed as in *ochraceus*, and, moreover, is more delicately built than in the latter species in all details. The posterior portion from the parietal suture is unfortunately missing in the type, but we record the following measurements:—

	<i>punctulatus.</i>	<i>ochraceus.</i>	<i>Bocagei.</i>
Length from parietal suture to end of nasals.....	mm. 38	mm. 33	mm. 34
Width at the fronto-maxillary suture	12	12	10
Width at the constriction behind the postorbital process.	11	14	12
Length of palate from hen-selion	33	27	29

Type. ♀. B.M. no. 5. 5. 9. 13. Original number 17. Taken September 3rd, 1904.

10. *Helogale* sp.

Young ♀. Quillenges.

11. *Canis* sp. (probably *C. adustus*, Sund.).

Quite young.

12. *Ictonyx* sp.

♂. Bulu Bulu, Bihé.

The specimen is apparently immature and the skull is missing.

13. *Pæcilogale albinucha*, Gray.

♀. 51. Pedreira, Bihé.

14. *Funisciurus congicus flavinus*, Thos.

♂. 86, 87, 91; ♀. 84, 92. Quillenges.

♂. 6. Usolo River, Benguella.

♀. 1, 2. Busolo, Benguella.

♂. 3. Sand-pits, Benguella.

♂. 4; ♀. 5. Katenge, Benguella.

♂. 11. Cabeça de Ladroes, Benguella.

♂. 10. Eland's Water, Benguella.

These specimens agree very fairly with the type. The five specimens from Quillenges, however, show a rather duller colour and broader lateral black stripe.

15. *Graphiurus Kelleni*, Reuvs.

♂. 47; ♀. 46. Pedreira, Bihé.

We provisionally identify these specimens with *G. Kelleni*, described by Reuvs * from Damaraland.

16. *Graphiurus angolensis*, de Winton.

♂. 45. Pedreira, Bihé.

A young individual.

17. *Tatera* sp.

♂. 77, 93; ♀. 72, 73, 74, 76. Quillenges.

Closely allied to, if not identical with, *T. Lobengulæ*, de Winton †. Much smaller than *T. valida*, Bocage, which Dr. Ansorge obtained on his previous expedition.

18. *Dasymys nudipes*, Peters.

♀. 14. Kupa, Benguella. Alt. 3000 feet.

19. *Arvicanthis pumilio*, Sparrm.

♂. 21, 24; ♀. 16, 27, 63, 64. Caconda.

* 'Myoxidæ,' 1890, p. 35.

† Ann. & Mag. Nat. Hist. (7) ii. p. 4 (1898).

Approaching in its dark coloration *A. pumilio dilectus*, de Wint., rather than *A. p. cinereus*, Thos. & Schw.

20. *Pelomys campanæ*, Huet.

♀. 9. Eland's Water.

♀. 12, 13. Kupa, Benguella. Alt. 3000 feet.

21. *Pelomys frater*, Thos.

♂. 52. Pedreira, Bihé.

22. *Dendromus Ansorgei*, sp. n.

♂. 39. Caiala, Bihé.

♀. 23. Caconda.

A small species without dorsal stripe. Hair of the back soft and long (7–8 mm.), shorter and more sparse on the belly. General colour of upperside of body near "ochraceous buff" (Ridgway), but the long hair, which is slaty at the base and fulvous terminally, is easily disarranged, and the animal then looks darker and duller in colour than it really is. Under surface only differing from the upper in being rather paler. Face of the same colour as the body, cheeks rather paler, chin and throat white. Ears large, only very sparsely covered with short hairs. Tail long and slender, dark above, pale below.

Skull short and broad, the orbit very broad anteriorly, so that the zygomata are parallel in their whole length.

Dimensions of type (measured in the flesh):—

Head and body 60 mm.; tail 72; hind foot 17; ear 10.

Skull: greatest length 19; basilar length 11.5; greatest breadth 10; nasals, length 7; interorbital breadth 3; diastema 4.5; length of upper molar series 3.2.

Hab. Caconda, Benguella.

Type. ♀. B.M. no. 5. 5. 9. 52. Original number 23. Collected September 7th, 1904. A second specimen was taken at Caiala, Bihé, alt. 5600 feet, on the 17th October.

This species most resembles *D. messorius*, Thos.*, from the Cameroons. It differs from that species by its smaller size, longer looser coat, and by the coloration of its under surface, which is little lighter than the upper, instead of being nearly white.

23. *Dendromus* sp.

♂. 54. Pedreira, Bihé.

* Ann. & Mag. Nat. Hist. (7) xii. p. 340 (1903).

This specimen is quite young, but belongs to a form with black dorsal stripe.

24. *Steatomys Bocagei*, Thos.

♂. 40. Bingondo, Bihé.

♀. 57. Chiffamba, Bihé. Alt. 4900 feet.

25. *Steatomys minutus*, sp. n.

♂. 81. Fort Quillenges, Benguella.

Smaller than any form of *Steatomys* as yet described.

Hairs of the back soft, 5-6 mm. long. General colour of upper surface of the body near "hair-brown" (Ridgway), paling to drab on the sides; a sharp line marking the change to the pure white of the underside. Individual hairs of the back slate-coloured at their bases, paling to buff and tipped with black; those of the belly white to their bases. Face coloured like the back, cheeks and area behind the eyes to the base of the ears paler. Chin, lips, and "whisker-patch" white. Ears moderate, a tuft of fulvous hairs at their base in front; a narrow white margin to the conch behind. Fore legs white, as are also the inner side of the thigh and hind feet. Tail short, dark above, pale below, especially at its base.

Dimensions (those of the body taken in the flesh) :—

Head and body 85 mm.; tail 33; hind foot 13; ear 12.

Skull: greatest length 21.5; nasals 8; interorbital breadth 4; greatest breadth 11.5; basilar length 17; diastema 6; palatal foramina 4.5; upper molar row 3.4.

Hab. Quillenges, Benguella.

Type. ♂. B.M. no. 5. 5. 9. 56. Original number 81. Taken January 11th, 1905.

The nearest ally of this little species seems to be *S. pentonyx*, Scl.*, from the Cape Peninsula.

26. *Mus rattus*, L.

♂. 66; ♀. 65. Caconda, Benguella.

27. *Mus*. sp. (multimammate).

♂. 41. Bingondo, Bihé. Alt. 5100 feet.

♂. 48. Pedreira, Bihé. Alt. 5200 feet.

♂. 28, 31; ♀. 29. Caconda, Benguella. Alt. 5700 feet.

* *Malacothrix pentonyx*, W. Sclat. Ann. S. Afr. Mus. i. p. 202 (1899); Mamm. S. Afr. ii. p. 36 (1901).

28. *Leggada minutoides*, Smith.

♂. 55; ♀. 44, 49, 50, 56. Pedreira, Bihé. Alt. 5200 feet.

♀. 61. Caconda, Benguella.

♀. 7. Usolo River, Benguella.

29. *Cricetomys Ansorgei*, Thos.

♂. 67; ♀. 20, 60. Caconda, Benguella.

30. *Georychus Ansorgei*, sp. n.

♂. Kukema R., Bihé. Alt. 5900 feet. 5th October, 1904. B.M. no. 5. 5. 9. 74. *Type*.

A very large species of a buffy-yellowish colour, with short velvety fur.

Size very large, the skull decidedly larger than that of *G. Mechowi*, the largest species of the genus hitherto described. Fur close, short, and crisp; hairs of back about 7 mm. in length. A few scattered longer bristles present on sides and rump. General colour above uniform buffy (between buff and clay-colour of Ridgway), the hairs whitish at their extreme bases, then dull slaty, then buffy, their extreme tips inconspicuously darker. Under surface dull greyish white, with a silvery gloss, not defined at all from the colour of the sides, the hairs whitish to their roots. Head like body, but the muzzle darker, with soiled patches on each side of the mouth, as in *G. Mechowi*. Upper surface of hands and feet almost naked, the few hairs whitish. Tail-hairs long, dull whitish; extreme tip of tail naked, warty, but whether this is natural or due to accident we are not able to say.

Skull as compared with that of *G. Mechowi* decidedly longer, although in the single specimen the basilar suture is not closed, while it is in the two adult specimens of *G. Mechowi* before us. Nasals broad and heavy. Supraorbital region rounded, broad, and expanded, the region just behind the rudimentary postorbital processes markedly inflated; as a result the greatest interorbital breadth is greater than the least breadth across the brain-case above the meatus, the converse being the case in *G. Mechowi*. Zygomata broadly expanded, thicker and heavier than in the allied species. Anteorbital foramina about equally broad and high. Palatal foramina minute, situated about a quarter of an inch in front of the anterior cheek-tooth (close to it in *G. Mechowi*). Posterior palate short, parallel-sided. Bullæ with the part

which appears on the occipital surface narrow and high, not broadly rounded. Lower jaw with its angular region far broader than in *G. Mechowi*.

Teeth large and heavy, the incisors very broad.

Dimensions of the type (measured in the flesh):—

Head and body 260 mm.; tail 24; hind foot, s. u. 40, c. u. 44.

Skull: greatest length in middle line 58; basilar length 49; zygomatic breadth 43.5; nasals 23.3×7.4 ; interorbital breadth 19; breadth across postorbital processes 20.6; intertemporal constriction 11.3; least breadth above meatus 19; palate length 37; diastema 22; combined breadth of two upper incisors 8; height of angular region of lower jaw, from top of condyle, 27.

Hab. and *Type* as above.

This fine species may be readily distinguished from *G. Mechowi*, Peters, its only near ally, by its larger size, more inflated interorbital region, and the other details above recorded. The type of *G. Mechowi* came from Malanje in Northern Angola, quite near to Duque de Braganza, whence Dr. Ansorge obtained in his previous collection the examples we have used in making the above comparisons.

31. *Georychus* sp.

♂. 43; ♀. 53. Pedreira, Bihé, 5200 feet.

♂. 71; ♀. 70. Salamunjamba, Quillenges, Benguela.

♀. 34. Bunhe, Benguela, 6200 feet.

These specimens are smaller than the type of *G. Bocogei*, de Wint.*, which is, however, a very old individual.

32. *Lepus angolensis*, Thos.

♂. 59. Chiyuka, Bihé. Alt. 6000 feet.

33. *Lepus Ansorgei*, sp. n.

♂. 37. Caiala, Bihé.

♂. 35 (young). Chingwari.

A somewhat larger and more brightly coloured animal than *Lepus angolensis*, Thos.

Underfur copious; hair rather harsh, about 20 mm. long on the back. General colour above "wood-brown" (Ridgway), irregularly mottled with dark brown (so dark as to seem black

* Ann. & Mag. Nat. Hist. (6) xx. p. 323 (1897).

in most lights), the mottling almost absent on the sides. Individual hairs pale for their basal halves, blackish brown above with a bright pale buff subterminal ring; underfur pale slate-colour at its base, merging into a pinkish buff (near ecru-drab of Ridgway) and ending in a black tip. Below, the belly and chest are white; the hairs white to their bases. Face and crown coloured like the back, but the mottling finer; an obsolescent white frontal patch. Upper lip and base of whiskers buffy brown. Chin white; the hairs with slaty bases. Ears shorter than in *angolensis*; anterior half of their outer surface, for its basal half, coloured like the head, darker at the tip, at the back of which is a small black patch; fringe dull buffy, changing to black about an inch from the tip; posterior edge narrowly edged with white. Nuchal patch very large, extending along the median line of the back as far as the points of the ears when these are laid back. Throat clothed with long hair (27–30 mm.) forming a cinnamon-coloured ruff (the individual hairs with short black tips). Fore legs pale brown on the outer, white on the inner side. Inner side of hind legs white, a distinct black patch down the centre of the back of the thigh. Tail black above, white below.

Skull, as compared with that of *L. angolensis*, longer and narrower, with much more lightly built postorbital wings, of which the anterior and posterior processes are unusually slender. Projecting "shoulders" of anterior zygoma-root much less developed than in the allied species. Bullæ markedly smaller, their antero-posterior diameter 10 mm. as compared with 12 mm. in the fresh specimen of *L. angolensis*. Incisors with the same additional enamel line as described by Thomas in *L. angolensis*: this line is no doubt present more often than has been recorded.

Dimensions of the type (the external ones taken by collector):—

Head and body 460 mm.; tail 75; hind foot 106; ear 111.

Skull: greatest length 87; basilar length 67; nasals, diagonal length 38; interorbital breadth 17; greatest breadth 40; diastema 25; length of upper molar tooth-row 15.

Hab. Caiala, Bihé. Alt. 6000 feet.

Type. ♂. B.M. no. 5. 5. 9. 80. Original number 37. Collected October 8th, 1904.

This species differs from *L. angolensis*, Thos., which is also found in Bihé, by its more rufous coloration, shorter ears, large nuchal patch, and by the skull-characters mentioned above. The only other hare described from Angola is

L. Salæ, Jentink*, from Mossamedes; but from the description this seems to be a more brightly coloured animal with a much shorter tail, and a skull smaller in all dimensions except breadth.

34. *Cephalophus Grimmii*, L.

2. ♂. Bihé.

XIX.—*Descriptions of Three new Snakes discovered in South Arabia by Mr. G. W. Bury.* By G. A. BOULENGER, F.R.S.

Glauconia Burii.

Head not broader than neck; snout rounded; rostral broad, more than half the width of the head, extending to between the eyes; nasal completely divided, in contact with præfrontal; supraocular present, a little larger than the frontal; no enlarged parietal; ocular bordering the lip, between two labials, the first of which is very small and scarcely deeper than broad. 14 scales round the body. Diameter of body 52 times in the total length, length of tail $15\frac{2}{3}$ times. Caudal spine strong. Pale brown above, yellow beneath.

Total length 210 mm.; tail 15.

A single specimen from El Kubar, Upper Hushabi, near Yemen frontier.

This species is allied to *G. Blanfordii*, Blgr., from Sind and Baluchistan, and *G. Nursii*, Anders., from Aden. It differs from both in the much broader rostral and in the absence of enlarged parietal shields.

Zamenis variabilis.

Head short; snout truncate, strongly projecting. Rostral a little broader than deep, the portion visible from above measuring one third or two fifths its distance from the frontal; internasals as long as or a little shorter than the præfrontals; frontal much broader than the supraocular, once and one fourth to once and one third as long as broad, longer than its distance from the end of the snout, shorter than the parietals; loreal longer than deep; one præocular, forming a

* Notes Leyd. Mus. ii. 1880, p. 57.